

## Hales, Dana

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**From:** Hales, Dana  
**Sent:** Wednesday, January 13, 2021 4:24 PM  
**To:** 'Abraham, Sara Reji'  
**Cc:** Patel, Pravin; Martinsen, Jessica  
**Subject:** RE: Marcus Hook Generating Station permit question (PA0244449)

**Categories:** EZ Record - Shared

Hi Sara,

I finished going through the draft permit and fact sheet, and do have a few additional questions related to WET:

1. The summary table of WET test results includes an NOEC of 2 for Ceriodaphnia on June 2018 tests. 2% was not a dilution in the dilution series, so I'm wondering if this was a typo? Otherwise the NOEC value does not make sense to me.
2. Did you evaluate WET toxicity based on these NOEC and LC50 values, or did you evaluate the data using the TST approach? If the TST analysis was used, could you please provide a copy of the WET Analysis Spreadsheets for our review (if these electronically available)?

EPA's comments on this permit are due by next week, January 20, 2021. If you think we need a call to discuss any of my questions please let me know and I'll set that up. Of course I can always send comments and we can discuss afterwards, if that works best. Let me know.

Thanks,  
Dana

Dana Hales  
US Environmental Protection Agency  
Clean Water Branch  
Permits Section (3WD41)  
1650 Arch Street  
Philadelphia, PA 19103  
Phone: 215.814.2928  
Email: hales.dana@epa.gov

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**From:** Hales, Dana  
**Sent:** Tuesday, January 12, 2021 4:13 PM  
**To:** Abraham, Sara Reji <saabraham@pa.gov>  
**Cc:** Patel, Pravin <prpatel@pa.gov>; Martinsen, Jessica <Martinsen.Jessica@epa.gov>  
**Subject:** Marcus Hook Generating Station permit question (PA0244449)

Hi Sara,

I have been going through the Marcus Hook draft permit. I see that the permit applies the BPT requirements for the Steam Electric ELG (40 CFR 423.12), but does not include what appears to be applicable BAT requirements at 423.13. Based on my review of 423.13, it seems that the following BAT requirements may apply:

1. 423.13(a): There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid

2. 423.13(d)(1), (d)(2), and (d)(3) (which is related to (d)(1)):

(d)(1) The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown times the concentration listed below:

Pollutant or pollutant property	BAT effluent limitations	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2
Pollutant or pollutant property	Maximum for any 1 day –(mg/l)	Average of daily values for 30 consecutive days shall not exceed = (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )	( <sup>1</sup> )
Chromium, total	0.2	0.2
Zinc, total	1.0	1.0

<sup>1</sup> No detectable amount.

(2) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or State, if the State has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.

(3) At the permitting authority's discretion, instead of the monitoring specified in 40 CFR 122.11(b) compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

Does PADEP agree that these BAT requirements are applicable? If not, can you provide an explanation as to why? If so, are there any additional BAT requirements that may apply? I am still reviewing the permit, and may have additional questions but I will let you know if that's the case. Let me know what you think about the applicability of 40 CFR 423.13.

Thanks,  
Dana

Dana Hales  
US Environmental Protection Agency  
Clean Water Branch  
Permits Section (3WD41)  
1650 Arch Street  
Philadelphia, PA 19103  
Phone: 215.814.2928  
Email: [hales.dana@epa.gov](mailto:hales.dana@epa.gov)